

Hench et al. describe a Boiling Water Reactor (BWR) nuclear power plant that includes a safety monitor configured to provide summary information of a plurality of operating systems to an operator (Col. 3, lines 40-44). The safety monitor is operational at all times, but is not intended for use during normal operation of the plant (Col. 3, lines 58-60). The safety monitor includes an interpreter logic (22) that operates in standby mode during normal operation, (Col. 10, lines 15-16), and a keyboard (16) including a plurality of pushbuttons (1-6) for calling up a system status, and a plurality of pushbuttons (7-11) for calling up graphical trend displays (Col. 4, lines 30-32). The system status display shows abnormal or accident conditions, and the trend displays show the trend of selected parameters (Col. 4, lines 30-35). The primary output (graphical trend displays) is displayed unless an operator selects a secondary output by pushing a button associated with that display. The secondary display is displayed as long as the button is depressed. A CRT screen (9) automatically reverts to the primary display when the button is released (Col. 10, lines 6-12). Hench et al. also describe that the messages received by the safety monitor alert an operator so that the operator can confirm the incorrect alignment and take proper corrective action.

Notably, Hench et al. do not describe nor suggest switching a system to a second mode without going to a standby mode, wherein the second mode includes a predetermined configuration of valves, dampers, motors, and pumps different than the first mode.

Applicant respectfully submits that the pending claims are patentably distinguishable over Hench et al. Specifically, Claim 1 recites a method for operating a system having a plurality of modes and interlocks between the modes, wherein the method includes “operating the system in a first mode, the first mode comprising a predetermined configuration of valves, dampers, motors, and pumps; and switching the system to a second mode without going to a standby mode, the second mode comprising a predetermined configuration of valves, dampers, motors, and pumps different than the first mode.” Hench et al. do not describe nor suggest a method for operating a system having a plurality of modes and interlocks between the modes, wherein the method includes operating the system in a first mode, the first mode having a predetermined configuration of valves, dampers, motors, and pumps, and switching the system to a second mode without going to a standby mode, the second mode having a predetermined configuration of valves, dampers, motors, and pumps different than the first mode. Moreover, Hench et al. do not describe nor suggest switching a system to a second mode without going to a standby mode, wherein the second mode

includes a predetermined configuration of valves, dampers, motors, and pumps different than the first mode. Rather, and in contrast to the present invention, Hench et al. describe a safety monitor configured to provide summary information of a plurality of operating systems to an operator. Hench et al. also describe that “a primary object of the invention is to provide an apparatus for monitoring critical systems of a nuclear plant.” Hench et al. do not describe nor suggest switching a system to a second mode without going to a standby mode, wherein the second mode includes a predetermined configuration of valves, dampers, motors, and pumps different than the first mode. Rather, as best understood by Applicant, the invention described in Hench et al. is for monitoring the system only. Therefore, Applicant respectfully submits that Claim 1 is patentable over Hench et al.

Claims 2-6 depend directly from independent Claim 1. When the recitations of Claims 2-6 are considered in combination with the recitations of Claim 1, Applicant submits that dependent Claims 2-6 likewise are patentable over Hench et al.

Claims 26-30 are newly added. Claim 26 recites a method for operating a nuclear power plant system having a plurality of modes and interlocks between the modes, wherein the method includes operating the system in a first mode, the first mode comprising a predetermined configuration of valves, dampers, motors, and pumps; and automatically switching the system to a second mode without going to a standby mode, the second mode comprising a predetermined configuration of valves, dampers, motors, and pumps different than the first mode.”

Hench et al. do not describe nor suggest a method for operating a nuclear power plant system having a plurality of modes and interlocks between the modes, wherein the method includes operating the system in a first mode, the first mode having a predetermined configuration of valves, dampers, motors, and pumps; and automatically switching the system to a second mode without going to a standby mode, the second mode having a predetermined configuration of valves, dampers, motors, and pumps different than the first mode. Specifically, Hench et al. do not describe nor suggest automatically switching the system to a second mode without going to a standby mode, the second mode having a predetermined configuration of valves, dampers, motors, and pumps different than the first mode. Rather, and in contrast to the present invention, Hench et al. describe a safety monitor configured to provide summary information of a plurality of operating systems to an operator. Hench et al. also describe that “a primary object of the invention is to provide an apparatus for monitoring

critical systems of a nuclear plant. Therefore, Applicant respectfully submits that Claim 26 is patentable over Hench et al.

Claims 27-30 depend directly from independent Claim 26. When the recitations of Claims 27-30 are considered in combination with the recitations of Claim 26, Applicant submits that dependent Claims 27-30 likewise are patentable over Hench et al.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,



Robert B. Reeser, III
Registration No. 45,548
ARMSTRONG TEASDALE LLP
One Metropolitan Square, Suite 2600
St. Louis, Missouri 63102-2740
(314) 621-5070



24-NS-6049
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Robert W. Droege : Art Unit: 3641
Serial No.: 09/683,376 : Examiner: Keith, Jack W.
Filed: December 19, 2001 :
For: METHODS AND APPARATUS FOR :
OPERATING A SYSTEM :
RECEIVED

SUBMISSION OF MARKED UP CLAIMS

Commissioner for Patents
Mail Stop: NON-FEE AMENDMENT
P.O. Box 1450
Alexandria, VA 22313-1450

RECEIVED
JUN 03 2003
GROUP 3600

The following are marked up Claims in accordance with 37 C.F.R. 1.121(c)(1)(ii), wherein additions are underlined and deletions are [bracketed].

IN THE CLAIMS:

1. (once amended) A method for operating a system having a plurality of modes and interlocks between the modes, said method comprising:

operating the system in a first mode, the first mode comprising a predetermined configuration of valves, dampers, motors, and pumps; and

switching the system to a second mode without going to a standby mode, the second mode comprising a predetermined configuration of valves, dampers, motors, and pumps different than the first mode.

Respectfully Submitted,

Robert B. Reeser, III
Registration No. 45,548
ARMSTRONG TEASDALE LLP
One Metropolitan Square, Suite 2600
St. Louis, Missouri 63102-2740
(314) 621-5070